

Abstract

Provided is a method of preparing a proliferation-regulated recombinant adenoviral vector effectively, comprising preparing a proliferation-regulated vector plasmid by preparing a restriction enzyme-recognizing sequence in a vector plasmid having a proliferation-regulating unit and having an E1A region, a protein-coding region in a E1B region, a poly(A) signal sequence, and a recombinase-recognizing sequence in that order from upstream, by deleting an endogenous promoter in the E1A region or an endogenous promoter regulating expression of the protein-coding gene in one protein-coding region of the E1B region thereof and inserting the restriction enzyme-recognizing sequences in the deficient site, and introducing a promoter expressing specifically in a target organ in the restriction enzyme-recognizing sequence in the restriction enzyme-recognizing sequence; and additionally, integrating the proliferation-regulated vector plasmid into a vector plasmid having a adenoviral genome prepared by deleting the E1 region.